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SUMMARIES OF FOREIGN GOVERNMENT ENVIRONMENTAL REPORTS

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FOREIGN DOCUMENTS
ANNOUNCEMENTS

Number 6

SUMMARIES OF FOREIGN GOVERNMENT ENVIRONMENTAL REPORTS

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Washington, D. C. 20460

FOREWARD

Under a series of documents exchange agreements with environmental agencies in other countries, EPA is building a collection of environmental reports issued by foreign governments and international organizations. This is the sixth in a series of Announcements of foreign documents received.

The original documents can be obtained through the Library Systems Branch (see back page for order form). More detailed English abstracts can be provided when required. Full text translations, which are expensive, should be requested only when essential for operation of EPA programs. Translation Services Requisition Form #1350-1 is used to request translations.

A computerized search system is being developed which will allow future retrieval of these summaries by:

a. country
b. subject area

   air
   water
   noise
   pesticides
   radiation
   solid waste management

c. type of document

   legal/legislative/regulatory
   management/planning
   scientific/technical
   socio-economic

This series, which is devoted to summaries of government reports and concentrated on the legislative, economic and social aspects, supplements foreign scientific and technical literature abstracts covered by other EPA information services:

APTIC
SWIRS
PIC
NOISE

Ultimately, EPA plans to assemble a major collection of foreign government environments documents and to develop several approaches to the dissemination of this information to EPA staff. This announcement of documents received is the first step.

Brazil

Article/Source Title: Ecologia E Poluicao: Problemas Do Seculo XX (Ecology and Pollution: Problems of the Twentieth Century) by Scientific Editors: Homero Henrique Roas Rangel and Aristedes Pinto Coelho.

*Code*_____

Control No. SO-254

Date/Place of Publication: May 1972, Rio de Janeiro

Pages: 323 *Language:* Portuguese

Source Repository: LOC

This book is a compilation of a wide range of articles resulting from a program held for the Engineering Club and for COPROC-MEC (Center for Orientation and Protection, Ministry of Education and Culture). Included among the articles are those having to do with water pollution, the use of radioisotopes in the study of pollution, industrial waste, sound pollution in large cities, the treatment of biologically resistant industrial residues, and the action of air pollution on works of art.

Japan

Article/Source Title: United States-Japan Conference on Natural Resources Development. Sixth Meeting

*Code*_____

Control No. SO-255

Date/Place of Publication: September 2-3, 1971 Washington, D.C.

Pages: 165 *Language:* English

Source Repository: EPA

This report presents the highlights of the 6th U.S.-Japan Conference on Natural Resources, held in Washington, D.C., September 2-3, 1971. Scientists and administrators from both nations reviewed the accomplishments of the previous year and discussed possible new cooperative ventures to be undertaken in the future. The Conference was marked by increasing interest in the problem of pollution, particularly the prevention and removal of oil spills.

Brief mention is made of the Fourth Meeting of the Joint Panel on Air Pollution, held November 13-14, 1969, in Washington and the October 1970 meeting held in Tokyo to discuss organizational basis for future U.S. cooperation on the environment and the relationship of their cooperative programs to multilateral programs under the auspices of international organizations. Mention is made also of the activities of the Joint Panel on Water Pollution. Cooperative projects are being considered which relate to using U.S. advanced waste treatment research in Japan in sewage treatment construction and joint research on toxic materials.

Japan

Article/Source Title: Research and Development of "Pattern Information Processing System" Under National Research and Development Program. Published by the Agency of Industrial Science and Technology, Ministry of International Trade and Industry

Code _____

Control No. SO-256

Date/Place of Publication: 1971, Tokyo
Pages: 9 *Language:* English
Source Repository: EPA

In the Appendix of this publication (pages 7-9), the nine projects of the System of the National Research and Development Programs are listed. Included are:

Desulfurization Process. Sulfur removal from stack gas and sulfur removal from fuel oil. Project period: 1966-1971. Total cost: $6.94 million. Objective: Develop technologies for removing sulfur directly from heavy oil.

Electric Car. Project period: 1971-1975. Total cost: $13.89 million. Objective: Development of an electric car for city-bound transportation.

Turbofan Engine for Aircraft, 1st phase. Project period: 1971-1975. Total cost: $18.61 million. Objective: Development of a turbofan engine which, among other things, will generate less pollutants.

Netherlands

Article/Source Title: "Handling of Derivatives: New Transshipment Method at Rotterdam 'Chemiehaven'." Rotterdam-Europoort-Delta

Code _____

Control No. SO-257

Date/Place of Publication: 1972/73 (Published Quarterly by the Port of Rotterdam)
Pages: 23-24 *Language:* English
Source Repository: EPA

In an article dealing with the transshipment and storage of derivatives at the new 'Chemiehaven' basin facilities of the Graan Elevator Maatschappij (GEM) in Rotterdam, mention is made of the fact that GEM has given maximum consideration to the prevention of dust pollution. The cost involved amounted to 7% of the total sum invested, $4,000,000. Dust extractors fitted with dust filters are installed at various locations in the unloaders. These extractors use about 15% of the power consumption of each machine. Additional extractors with dust filters are installed at various places along the entire transport route from the sea-going ship to the barge/coasters.

Scotland

Article/Source Title: "Pollution Problems from Waste Incineration and Possible Remedies" by W. Short, (N.I.F.E.S.). Clean Air
Date/Place of Publication: Spring 1971, Brighton, England
Pages: 20-33 *Language:* English
Source Repository: LOC

*Code*_____
Control No. SO-258

This paper, delivered to the Scottish Clean Air Conference, 1970, treats incinerator design problems, including calorific values and waste quantity, residue material and gaseous residue. In discussing noxious gases from refuse incineration, gas cleaning and chimneys and the dispersal of gases is discussed. A large part of the paper is devoted to special waste problems, including: commercial waste; solid waste of high calorific value; chemical waste; general factory waste; wood waste, and; solvent effluent vapors.

South Africa

Article/Source Title: "Pollution of Air" by E.C. Halliday. Habitat RSA
Date/Place of Publication: March 1972, Johannesburg
Pages: 52-55 *Language:* English/Afrikaan
Source Repository: EPA

*Code*_____
Control No. SO-259

The major air pollutant in the RSA is smoke from industries due to lack of low volatile fuels and thermal atmospheric stagnation in the northern parts of the republic.

The Atmospheric Pollution Prevention Act gives local authorities power over industrial smoke emissions. Section 20 sets up smoke control zones and Part II puts control of industrial pollution in the hands of the Chief Air Pollution Control Officer of the State Department of Health.

Control of automobile exhausts in the RSA is not yet considered necessary.

South Africa

See WATER (South Africa) -- Control No. SO-274

*Code*_____

USSR

Article/Source Title: Meteorologicheskiye aspekty zagryazneniya atmosfery (Meteorological Aspects of Atmospheric Pollution). Editor: M.E. Berlyand
Date/Place of Publication: 1971, Leningrad
Pages: 371 *Language:* Russian
Source Repository: LOC

*Code*_____
Control No. SO-260

The book is a collection of the articles presented at the International Symposium in Leningrad, July 1968. It contains 39 contributions on various aspects of meteorology and air pollution, such as characteristics of pollution. A large body of articles deal with concentration, dispersion and diffusion of pollutants and polluted air; many deal with pollution in the context of industry and power plants; and others discuss specific types of pollution, such as photochemicals, heavy metals, and smoke. At least one article is highly technical: on surface roughness and air flow.

USSR

Article/Source Title: "Atmospheric Diffusion and Air Pollution." Trudy ordena trudovogo krasnogo znameni glavnoy geofizicheskoy observatorii im. A. I. Voyeykova (Studies of the Red Banner A.I. Voyeykov Main Geophysical Observatory), vyp 254.
Date/Place of Publication: 1971, Leningrad
Pages: 204 *Language:* Russian
Source Repository: LOC

*Code*_____
Control No. SO-261

The book is a collection of articles dealing with various aspects of air pollution. Some articles discuss distribution and dispersion of exhausts from general industrial factories, synthetic fiber plants, and elevated exhaust sources. There are some studies of air movement in the lower atmosphere, including inversions, and on calculation of atmospheric turbidity. Others treat statistics of pollution content, principally in city air, and the problem of choosing the number, location, and frequency of air pollution observations. Still other articles concern measurement of the chemical composition of the atmosphere, particularly halogen compounds, hydrogen fluoride, sulfurous gases, and carbon monoxide, using instruments such as a coulombometer and an automatic gas analyzer.

USSR

See PESTICIDES (USSR) -- Control No. SO-267 and *WATER (USSR)* -- Control No. SO-278

*Code*_____

West Germany

Article/Source Title: "On the Way to Manufacture without Environmental Pollution" by D. Behrens. Chemische Industrie (Chemical Industry)
Date/Place of Publication: May 1972, Frankfurt
Pages: 283-287 *Language:* German
Source Repository: LOC

*Code*_____
Control No. SO-262

The article holds that the problem industry has in connection with pollution is to hold it to acceptable levels, rather than to restore environmental conditions to pre-industrial levels. For this reason the author calls for extensive research into environmental influences and their effects. Also advanced is the proposition that air and water pollution regulations should be coordinated on an international basis. Charts of the amounts of various pollutants in the air and water contributed by different industries, such as energy (including even thermal pollution) and transport, are given.

West Germany

Article/Source Title: "Toward a Design for a Bill on Emissions." Chemische Industrie (Chemical Industry)
Date/Place of Publication: May 1972, Frankfurt
Pages: 271-272 *Language:* German
Source Repository: LOC

*Code*_____
Control No. SO-263

During the course of its environmental protection program, the German government has prepared a draft of a bill for protection against air, noise, vibration, and similar pollution phenomena. The article discusses the factors which must be included in such considerations and their affect on industry and transportation in particular. The main problem is the establishing of standards for emissions and providing for their enforcement.

Yugoslavia

Article/Source Title: "Danger Comes From The Air" by A. Misic. Politika (Politics)
Date/Place of Publication: July 9, 1972, Belgrade
Page: 9 *Language:* Serbo-Croatian
Source Repository: EPA

*Code*_____
Control No. SO-264

As an argument for a general law concerning air pollution, several health problems are presented which seem to stem from contaminated air: bronchial asthma, arteriosclerosis, lung cancer, and decline in body weight. Studies were done in several cities of Serbia on the incidence of asthma and lung cancer, and the results are given. There are also measurements given of air pollution in a number of cities.

A I R

Yugoslavia — *See WATER (Yugoslavia)* -- Control No. SO-285 — *Code*_____

N O I S E

Brazil — *See AIR (Brazil)* -- Control No. SO-254 — *Code*_____

South Africa — *Code*_____

Article/Source Title: "The Effect of Noise and the Rate of Living on Man" by G.H. Winter-Moore. Habitat RSA
Date/Place of Publication: March 1972, Johannesburg
Pages: 100-101 *Language:* English/Afrikaan
Source Repository: EPA

Control No. SO-265

The article discusses results of the activities of the Johannesburg City Council's Noise Abatement Bureau. There is a file of complaints made about noise which corroborates the notion that noise has a deleterious effect on the human organism. Sound level analyses were also made.

USSR — *Code*_____

Article/Source Title: Borba s shumom v gorodakh (Fighting Noise in Cities) by I.L. Karagodina et al.
Date/Place of Publication: 1972, Moscow
Pages: 155 *Language:* Russian
Source Repository: LOC

Control No. SO-266

Noise in cities is approached as a health problem with discussions of the effects of transport and habitation noise on the human organism (including effects on hearing, reflexes, and heart and arteries). Methods for the study of such problems are advanced.

Norms for noise levels are established, considering the acoustic character of noises in question, and results of studies on noise distribution in the presence of barriers are given. A special section is devoted to means of protection against airplane noise and methods of decreasing that noise as well as to methods of isolating habitation noise such as that from construction.

Methodology of noise measurement is presented along with numerous diagrams and graphs of the results of the studies.

West Germany — *See AIR (West Germany)* -- Control No. SO-263 — *Code*_____

PESTICIDES

South Africa — *See GENERAL (South Africa)* -- Control No. SO-286 — *Code*_____

USSR — *Article/Source Title:* Sanitarnaya okhrana vneshney sredy ot zagryazneniya pestitsidami (Sanitary Protection of the Environment from Pesticides) by S. Ya. Nayshteyn and G.V. Merenyuk — *Code*_____ *Control No.* SO-267

Date/Place of Publication: 1971, Kishinev
Pages: 171 *Language:* Russian
Source Repository: EPA

The book is a comprehensive discussion of pesticide pollutants in air, water, and soil with remarks on their physico-chemical characteristics (including stability), and on the cycling of pesticides in trace quantities through the environment. There are sections devoted to the influences of pesticides on water quality, biochemical processes in the soil, and on self-purifying capabilities of soil and water; the general toxicity of pesticides (their effects on sexual and generative functions); and protective and control measures for pesticides in the soil and water. There is also a 20-page bibliography.

Yugoslavia — *See WATER (Yugoslavia)* -- Control No. SO-285 — *Code*_____

RADIATION

Japan — *Article/Source Title:* "Present and Future of Nuclear Power Generation" by Yukinobu Takaoka and Kosei Iinuma. CEER: Chemical Economy and Engineering Review — *Code*_____ *Control No.* SO-268

Date/Place of Publication: March 1971, Tokyo
Pages: 9-13, 28-29 *Language:* English
Source Repository: LOC

In discussing Japan's Long-Range Program for Development and Utilization of Atomic Energy, formulated in 1967, the authors, in outlining recent problems, point out that Japan will produce 1500 tons of spent fuel in 1985, as a result of nuclear power generation. Japan's first reprocessing plant for spent fuel, with a capacity of 210 tons per year, is scheduled to go on-stream in 1973.

Present regulations require that radioactive waste produced in reprocessing be kept in custody, but coping with the future increase of spent fuel for reprocessing will pose a serious problem. The Atomic Energy Commission is now studying the matter. Ocean disposal can

RADIATION

Japan (Control No. SO-268) *continued:*

only be done under appropriate international cooperation. Because of Japan's large population and small land mass, radioactive waste must be minimized. Therefore, research and development work should be conducted on a dry system of reprocessing and measures taken to reduce gaseous waste.

The Japanese people have an intense fear of radioactivity, therefore, it is recognized that to ensure greater freedom of choice in selecting nuclear power generation sites, new construction techniques must be studied while improving safety facilities.

SOLID WASTE

Brazil — *See AIR (Brazil)* -- Control No. SO-254 — *Code*_____

WATER

Brazil — *See AIR (Brazil)* -- Control No. SO-254 — *Code*_____

France — *See WATER (Netherlands)* -- Control No. SO-270 — *Code*_____

Japan — *Article/Source Title:* "Closed System for Sea-Water Pollution Control." CEER: Chemical Economy and Engineering Review — *Code*_____ *Control No.* SO-269

Date/Place of Publication: April 1972, Tokyo
Page: 63 *Language:* English
Source Repository: LOC

The Yokohama Port Authority has placed an order with Mitsubishi Kakoki for a continuous treating unit for waste oil discharged from vessels. The unit, representing a closed system, will be capable of recovering oil from the oily waste, burning the sludge, removing sulfur from the flue gas generated by the combustion of the gas, and collecting dust on a continuous basis.

In June 1971, a Japanese law to prevent seawater pollution went into effect. Beginning in June 1972, all ocean-going vessels will be prohibited from throwing oily wastewater into the ocean.

Mitsubishi Kakoki's new unit (MKK process) is outlined, including graphically.

Japan — *See AIR (Japan)* -- Control No. SO-255 — *Code*_____

Netherlands *Article/Source Title:* "Research: Cost of Pollution." Enterprise (Venture) *Code*_____
Date/Place of Publication: September 15, 1972, Paris, France *Control No.* SO-270
Page: 55 *Language:* French
Source Repository: EPA

By 1976, the DSM, a large Netherlands chemical firm, will have spent 50-100 million florins to systematically purify its effluents from the Limburg works. December 1970 legislation stipulated that not another gram of noxious substances can be added to the Meuse. DSM, therefore, must reduce the "biological demand for oxygen" of its effluent and decrease the percentage of hydrogen (in nitric, ammoniac and ureal form). Figures are given for the volume of industrial waste.

DSM isn't the only spectacular case; industrial development all along the Rhine-Meuse is blocked because of industrial pollution. The German BASF hopes to have equipment in operation by 1975 to eliminate hydrogen from its wastes. Production of the Alsatian Potash Mines (France) is limited due to the amount of salt ejected into the Rhine by its operation.

Poland *Article/Source Title:* "On Adequate Principles in Preservation of Lakes" by P. Olszewski. Gospodarka Wodna (Water Economy) *Code*_____
Date/Place of Publication: June 1972, Warsaw *Control No.* SO-271
Pages: 218-221 *Language:* Polish
Source Repository: LOC

The article points out that processes and phenomena that occur in lakes are quite different from those in running water. After a discussion of the trophogenic and tropholytic layers, the effects of waste products on such standing waters are considered. A distinction is made between various types of lakes as to the degree of purification which is needed or feasible; most lakes should be preserved completely with all means possible, but others, beyond a certain point of pollution, can only be guarded against an excessive rate of degradation.

Poland

Article/Source Title: "Intensification of Waste Processing at Some Existing Low-Performance Stations" by H. Manczak. Gospodarka Wodna (Water Economy)
Date/Place of Publication: May 1972, Warsaw
Pages: 183-188 *Language:* Polish
Source Repository: LOC

*Code*_____
Control No. SO-272

The paper discusses adapting mechanical waste-processing stations to biological methods. Examples are given of plants which have been modernized to handle household, district, industrial and municipal wastes. Major attention is paid to descriptions (and diagrams) of such devices as the Bernhardt purifier (57% effective), the Scharfe sedimentation tank, Imhoff sedimentation tanks of various sizes, Meyeronat deflectors (80% effective) and others. The biological adaptation of the devices is explained.

South Africa

Article/Source Title: "Pollution of Water" by R. J. Laburn. Habitat RSA
Date/Place of Publication: March 1972, Johannesburg
Pages: 38-49 *Language:* English/Afrikaan
Source Repository: EPA

*Code*_____
Control No. SO-273

The author considers water pollution in light of natural water quality. He discusses problems encountered in the Vaal and Witwatersrand river areas, with a proposal to separate types of polluted water by grades for specific reuse by industry and agriculture. One major point is the mineralized water pumped from mines which could be put to non-potable use from storage in "pans" or man-made lakes which could also be used for recreation. Such separation implies as well at least a dual system of water supply by grade.

Particular attention is paid to the Rand Water Board which has been trying to control pollution since 1914. The 1956 Water Act sets standards for effluents, and the Department of Water Affairs controls quality in rivers.

South Africa

Article/Source Title: "The Utilization and Exploitation of Mineral Resources by Man" by A.W.S. Schumann. Habitat RSA *Code*_____
Date/Place of Publication: March 1972, Johannesburg *Control No.* SO-274
Pages: 69-81 *Language:* English/Afrikaan
Source Repository: EPA

In the course of discussing the notion of conservation of mineral resources (mainly metals) and aspects of their utilization, the author comments on the pollution factors involved. After addressing the question of the cost of controlling pollution by metals industries (emissions and effluents), he turns to what the South African mining industry has been doing, such as stabilization of mine dumps and slimes dams.

USSR

Article/Source Title: Ochistka i ispolzovaniye stochnykh vod na predpriyatiyakh chernoy metallurgii (Purification and Use of Waste Water in Ferrous Metallurgy) by A.F. Shabalin *Code*_____
Date/Place of Publication: 1968, Moscow *Control No.* SO-275
Pages: 505 *Language:* Russian
Source Repository: EPA

After general discussions on the role of water in ferrous metallurgy, the composition of wastewater from different types of plants, different types of purification mechanisms, and the uses of wastewater in factories, the author turns to special interests. More detailed studies are offered on the wastewater from plants for acid treatment of metals, coal-enriching and coke plants, and ore-enriching plants. Subsequent sections deal with recycling a plant's water supply, the actual use of purification devices, conditions for releasing wastewater, and the economics of construction for purifying purposes.

USSR

Article/Source Title: Materialy nauchno-tekhnicheskoy konferentsii "Progressivnyye metody ochistki prirodnykh i stochnykh vod" (Materials of the Conference "Progressive Methods of Purifying Natural and Waste Water"). Sb. No. 2 *Code*_____
Date/Place of Publication: September 1971, Moscow *Control No.* SO-276
Pages: 103 *Language:* Russian
Source Repository: EPA

This volume of the materials is entitled "Ochistka stochnykh vod" (Purification of wastewaters). It contains 44 contributions by various researchers dealing with wastewaters from many sources (normal sewage, oil-refining and petrochemical industry, dying

USSR (Control No. SO-276) *continued:*

and finishing plants, yeast production, foundries, fiberglass, synthetics, leather, wool, mining, ferrous metallurgy, light industry, and others). Specific contaminants dealt with are sulfur compounds, acids, nitrides, alcohols, surface-active substances, organic and mineral mixtures, and others. Processes discussed include neutralization, filtration, flotation, electrocoagulation, oxygenation, aeration, those of a biochemical, electrochemical, and magnetic nature, as well as use of centrifuges and thermal drying.

USSR

Article/Source Title: Trudy Instituta VODGEO (Works of the VODGEO Institute), No. 28 *Code*_____
Date/Place of Publication: 1970, Moscow *Control*
Pages: 85 *Language:* Russian *No.* SO-277
Source Repository: EPA

The VODGEO (Vsesoyuznyy nauchno-issledovatelskiy institut vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii -- All Union Scientific Research Institute of Water-Supply, Channelization, Hydrotechnical Installations, and Engineering Hydro-Geology) has published here 19 articles under the title "Purification of Industrial Waste Water." For the most part, the articles deal with light industries and those connected with petrochemistry. The main pollutants discussed are petroleum-related. Processes touched on include aeration, filters and vacuum filters, catalysis with molecular oxygen, ozonization, and reagents. Biochemical processes are mentioned and one article considers the self-purification phenomenon.

USSR

Article/Source Title: "What the USSR, Absent from Stockholm, is Doing to Combat Contamination of Nature" by D. Radovic. Borba (Battle) *Code*_____
Date/Place of Publication: June 15, 1972, Belgrade *Control No.* SO-278
Page: 3 *Language:* Serbo-Croatian
Source Repository: EPA

The main problems in the USSR are industrial pollution of rivers and general contamination of cities. In the past years, billions of rubles have been spent for purification devices on the Volga, Ural, and Kama rivers. (The 670 purification complexes in the basins can handle 550 million m^3/day.) All effluents into these rivers will be completely purified, including those from Kama auto plant for which such equipment is included in the construction.

USSR (Control No. SO-278) *continued:*

The problem of air pollution in Moscow will be greatly solved by the conversion to gas heat. In Leningrad, the particular problem is pollution of the rivers and canals, but effluent control has that largely checked.

USSR

Article/Source Title: Voda i stochnyye vody v pishchevoy promyshlennosti (Water and Waste Water in the Food Industry), coll. authorship (translated from Polish)
Date/Place of Publication: 1972, Moscow
Pages: 377 *Language:* Russian
Source Repository: EPA

*Code*_____
Control No. 279

The book begins with a few remarks on water quality in the food industry in general and then devotes some space to the chemistry of wastewaters from that industry, covering a large list of contaminants. There is discussion of devices for measuring waste waters and, in particular, of devices for purification. These latter include mechanical means, such as grates, sieves, sedimentation tanks, etc.; chemical means, such as coagulation, chlorification, and aeration; and various biological processes.

The major emphasis is on the character, quantity, and purification of wastewaters in the individual branches of the food industry: sugar, yeast, alcohol, brewing, meats, fowl, fish, milk, fruits and vegetables, potatoes, and oils and fats. The efficacy of the different means is discussed and there are remarks on control factors for the purification stations.

The book contains 94 tables of experimental results and 115 illustrations of devices and systems.

USSR *See PESTICIDES (USSR)* -- (Control No. SO-267) *Code*_____

USSR

Article/Source Title: "More Spent on Environmental Protection." Chemische Industrie (Chemical Industry)
Date/Place of Publication: May 1972, Frankfurt
Pages: 272-275 *Language:* German
Source Repository: LOC

*Code*_____
Control No. SO-280

The article discusses amounts spent by the German chemical industry on the abatement of environmental pollution in the period 1960-1969. Water pollution claims the major part of capital investment and operating costs. Extensive tables of chemical industrial outlays for various aspects of pollution control for the period 1960-74 and a breakdown according to the different types of pollution are presented.

West Germany

Article/Source Title: "Physico-Chemical Methods of Effluent Treatment." Chemische Industrie (Chemical Industry)
Date/Place of Publication: May 1972, Frankfurt
Pages: 277-279 *Language:* German
Source Repository: LOC

*Code*_____
Control No. SO-281

This article is mainly concerned with the removal of solids and dissolved organic substances from effluents through mechanical and biological treatment techniques. Pollutants considered are metals (which can be precipitated as sulfides or hydroxides), phosphorous and nitrogen compounds (which can be precipitated as ammonia salts), and dyes (for which flocculation-adsorption is proposed). Other processes discussed are alkalization, adsorption, reverse osmosis, and oxidation.

West Germany

See AIR (West Germany) -- Control No. SO-262 and *WATER (Netherlands)* -- Control No. SO-270

*Code*_____

Yugoslavia

Article/Source Title: Series on the Symposium for the Preservation of the Tara River and Its Canyon by B. Pusonjic. Politika (Politics)
Date/Place of Publication: 13,18,22 September and 29 July 1972, Belgrade
Pages: 9,7,9,7 *Language:* Serbo-Croatian
Source Repository: EPA

*Code*_____
Control No. SO-282

The series of articles deals with the Symposium for the Preservation of the Tara River and Its Canyon, held 15-16 September 1972 in Zabljak. Attending were representatives of all interested groups, including government, business, conservationists, etc. The Tara River is of particular importance since it is recognized as the most typical canyon in the world, after that of the Colorado River. The principle problems involved were plans for construction of hydroelectric installations on the swift stream and the dumping of wastes from the Mojkovac mine. Results of the symposium were a concerted intention to preserve the river and the establishment of a contribution fund for the effort.

Yugoslavia

Article/Source Title: "Rivers and Lakes are at Once Everyone's and No One's." Politika (Politics)
Date/Place of Publication: July 3, 1972, Belgrade
Page: 21 *Language:* Serbo-Croatian
Source Repository: EPA

*Code*_____
Control No. SO-283

The article discusses, in general, the draft of a new water law prepared by the Jaroslav Cerni Institute in Belgrade for the Socialist Republic of Serbia. It

Yugoslavia (Control No. SO-283) *continued:*

concerns the position and status of water economy in the general system, organization and regulation, constructions, and other aspects of the problem of water protection. It also proposes a Secretariat of Water Economy which would apply the laws and standards.

Yugoslavia *Article/Source Title:* "Dead Fish in the 'Resort Zone'" by R. Kovacevic. Politika (Politics) *Code*_____
Date/Place of Publication: June 30, 1972, Belgrade *Control*
Page: 9 *Language:* Serbo-Croatian *No.* SO-284
Source Repository: EPA

Yugoslavia is finding that the problem of sea pollution by dumps of oil and fuel oil from tankers on runs up the Adriatic is reaching major proportions. This is complicated by industrial wastes, especially from the Split area.

The city of Kopar has decided to buy a 500-ton boat which will collect and purify the dumped oil. The Rijeka and Bakar ports have also built equipment for gathering the pollutants. However, the major ports of Split, Ploce, and Bar have done nothing.

Yugoslavia has signed an international convention for protection of the sea from oil pollution, but it has not yet been ratified. The convention would call for ports to have specific areas for boats to jettison contaminants where they could be dealt with properly.

Yugoslavia *Article/Source Title:* (Series), "The Crisis in Human Environment" by V. Petrovic. Politika (Politics) *Code*_____
Date/Place of Publication: 25, 26, 27 June 1972, Belgrade *Control*
Pages: 7, 5, 9 *Language:* Serbo-Croatian *No.* SO-285
Source Repository: EPA

The series of articles deals with three phases of the environmental crisis in Yugoslavia: water, air, and pollution/destruction of the soil by chemicals and pesticides. In each installment various details of the crisis are discussed. In the first it is stated that the Adriatic is in danger of dying within 25 years and that there is no longer any life in the Mura, Sava, Savinja, Bosna, Borska Reka, Resava, and part of the Lima Rivers. In the second, besides discussing the effect of the internal combustion engine on the air, it is pointed out that: lead in exhausts at Kosovo Mitrovica has apparently caused sterility in women, total dearth of wild birds, etc.; SO_2 has killed 22,000 ha of forest near Bor and caused 600 ha of wheat near Sapac not to bear; and the CO situation in Belgrade, Zenica, Split, and Zagreb

Yugoslavia (Control No. SO-285) *continued:*

is critical. The third has to do with increased production of chemicals and pesticides which have caused the denudation of 1,636,000 ha and the degradation of 1,700,000 ha. This latter leads to drastically increased erosion which changes ground water levels and consequently endangers even more forest areas.

GENERAL

South Africa

Article/Source Title: "Pollution by Agriculture" by E.D. Adler. Habitat RSA
Date/Place of Publication: March 1972, Johannesburg
Pages: 106-118 *Language:* English/Afrikaan
Source Repository: EPA

*Code*_____
Control No. SO-286

The article first presents statistics on the agricultural growth of South Africa and then goes into the history of reports on land status (principally erosion). The chemical aspcts of soil pollution are discussed at length: raised or lowered PH, increased sodium and salt content, and depletion of vital minerals. Yet another type of pollution is that of native vegetation caused by importation of plants and spread of undesirable and poisonous plants (bush encroachment). Research done on bush encroachment is given as well as remarks on various poisonous plants. There are also some details on the use of the pesticides DDT and BHC.

West Germany

Article/Source Title: "Practical Consequences of the Waste Disposal Bill for the Chemical Industry." Chemische Industrie (Chemical Industry)
Date/Place of Publication: July 1972, Frankfurt
Pages: 436-438 *Language:* German
Source Repository: LOC

*Code*_____
Control No. SO-287

The article discusses questions inherent in the new German Waste Disposal Bill of 7 June 1972. These include what wastes must be reported, what kind of proof of disposal can be demanded, who has to dispose of the wastes, how they are to be disposed of, and where the wastes can be taken.

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